**APPENDIX F – WATER QUALITY INFORMATION** 

#### 4.5.1 Discharges (Houseboat, Watercraft, and Floating Structures)

#### 1. Marine Sanitation Device

No person operating a commercial boat dock on or over real property of the United States in the custody and control of TVA, or on or over real property subject to provisions for the control of water pollution in a deed, grant of easement, lease, license, permit, or other instrument from or to the United States or TVA shall permit the mooring on or over such real property of any watercraft or floating structure equipped with a marine sanitation device (MSD) unless such MSD is in compliance with all applicable statutes and regulations, including the FWPCA and regulations issued there under, and, where applicable, statutes and regulations governing "no discharge" zones.

#### 2. No Discharge Zones

The Environmental Protection Agency has designated certain TVA reservoirs as "no discharge" lakes. Whenever a vessel equipped with a Type I or Type II MSD (these types discharge treated sewage) is operating in an area of water that has been declared a No Discharge Zone, the MSD cannot be used and must be secured to prevent discharge. No Discharge Zones are areas of water that require greater environmental protection and where even the discharge of treated sewage could be harmful. When operating in a No Discharge Zone, a Type I or Type II MSD must be secured in some to prevent discharge. Closing the seacock and padlocking, using a non-releasable, wire- tie, or removing the seacock handle would be sufficient. Generally, all freshwater lakes (and similar freshwater impoundments or reservoirs that have no navigable connections with other bodies of water), and rivers not capable of interstate vessel traffic, are by definition considered No Discharge Zones.

TVA No Discharge Lakes Include:					
Beech River Project Boone Cherokee Douglas Ft. Patrick Henry Nolichucky Normandy Norris Ocoee 1, 2, 3		Tims Ford Watauga Wilbur Appalachia Hiwassee Nottely Blue Ridge Bear Creek Projects Fontana			

## 4.5.3 Marina Sewage Pump-Out Stations and Holding Tanks

All pump-out facilities constructed after the effective date of these regulations shall meet the following minimum design and operating requirements:

1. Spill-proof connection with shipboard holding tanks.

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- 2. Suction controls or vacuum breaker capable of limiting suction to such levels as will avoid collapse of rigid holding tanks.
- 3. Available fresh water facilities for tank flushing.
- 4. Check valve and positive cut-off or other device to preclude spillage when breaking connection with vessel being severed.
- 5. Adequate interim storage where storage is necessary before transfer to approved treatment facilities.
- 6. No overflow outlet capable of discharging effluent into the reservoir.
- 7. Alarm system adequate to notify the operator when the holding tank is full.
- 8. Convenient access to holding tanks and piping system for purposes of inspection.
- 9. Spill-proof features adequate for transfer of sewage from all movable floating pump-out facilities to shore-based treatment plants or intermediate transfer facilities.
- 10. A reliable disposal method consisting of:
  - a. An approved upland septic system that meets TVA, state, and local requirements; or
  - b. Proof of a contract with a sewage disposal contractor.
- 11. A written statement to TVA certifying that the system shall be operated and maintained in such a way as to prevent any discharge or seepage of wastewater or sewage into the lake.

## 4.5.5 Storage Tanks (USTS and ASTS)

1. A underground storage tank (UST) is any one or combination of tanks used to contain a regulated substance (such as a petroleum product), which has 10 percent or more of its total volume beneath the surface of the ground. The total volume includes any piping used in the system. A UST may be a buried tank, or an aboveground tank with buried piping if the piping holds 10 percent or more of the total system volume including the tank.

TVA's review for application to install a UST below the 500-year flood elevation on a TVA reservoir, or regulated tailwater will require:

- a. A copy of the state approval for the UST along with a copy of the application sent to the state and any plans or drawings that were submitted for the state's review.
- b. Secondary containment for all piping or other systems associated with the UST.
- c. Secondary containment to contain leaks from gas pumps(s).
- d. Calculations showing how the tank will be anchored so that it does not float during flooding should be provided by a professional engineer.
- e. If the UST system includes surface storage capacity greater than 1,320 gallons or any one surface container exceeding 660 gallons, a Spill Prevention, Control and Countermeasure (SPCC) plan must be prepared by the facility in accordance with applicable regulations. Facilities with a buried storage capacity greater than 42,000

gallons may also require SPCC plans. The SPCC plan must be prepared under the supervision of a professional engineer, maintained at the facility, and available for inspection and use by facility employees in the event of a spill.

- f. That a facility's current employees are up-to-date in SPCC training.
- g. That the applicant must accept TVA approval language stating that the permittee, licensee, or grantee is at all times the owner of the UST system, that TVA will have the right to prevent or remedy pollution or violation of law including removal of the UST system, with costs charged to the applicant, and that TVA will require the applicant to be in compliance with applicable federal and state regulations at all times.
- h. TVA will require that the facility maintain eligibility in the appropriate state trust fund and remain in compliance with applicable state and local UST regulations.

## 2. Aboveground Storage Tanks (ASTs)

For TVA's purposes, an AST is any storage tank whose total volume (piping and tank) is less than 10 percent underground.

TVA's review for application to install an AST located below the 500-year elevation on a TVA reservoir or a regulated tailwater will require all of the information requested in 1304.7(a), except: state approval of the AST (not available). The applicant must notify the state fire marshal and obtain any necessary documents or permission from his or her office prior to installation of the AST. The applicant must also follow the NFPA codes 30 and 30a for installation of combustible liquids storage tanks at service stations.